

# STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



# Variance Suspension of Enforcement of Rule 225 For Certain Natural Gas Combustion Emissions

### 1. Variance Statement

In accordance with the provisions of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451), a variance is granted for a period of one year from the effective date of this document, suspending the requirements of Rule 225, promulgated pursuant to Act 451 (R 336.1225 Health-based screening level requirement for new or modified sources of air toxics) for each emission unit that combusts natural gas as fuel and meets either of the following criteria:

- Fuel-burning equipment or natural gas fired equipment, with a maximum natural gas usage rate
  of 50,000 cubic feet per hour or less, where the emissions from the natural gas combustion are
  discharged unobstructed vertically upwards from an emissions discharge point at least 1.5 times
  the height of the building most influential in determining the predicted ambient impacts of the
  emissions.
- 2. Air pollution control equipment, as defined by Act 451, not limited in the natural gas usage rate.

This variance is limited to the emissions from the combustion of natural gas only. The requirements of Rule 225 are not suspended for any emissions from the emission unit not resulting from the combustion of natural gas.

The source types that may qualify for this variance include, but are not limited to, natural gas fired boilers, internal combustion engines, and regenerative thermal oxidizers. This variance does not obviate the need for persons to apply for and obtain air use permits to install as required by Rule 201 (R 336.1201 *Permits to install*) unless otherwise exempt. However, while this variance is in effect, persons applying for a permit under Rule 201 for an emission unit(s) that meets either of the above-listed criteria will not need to demonstrate compliance with Rule 225 for emissions related to combustion of natural gas.

Permits issued while this variance is in effect will remain valid and in full force irrespective of the effective dates of this variance.

# 2. Regulatory Background

Part 55 of Act 451, along with rules promulgated pursuant to Act 451, regulates emissions of air pollutants to the ambient air.

Section 5535 (MCL 324.5535 Suspension of enforcement; reasons, variance) of Act 451 allows the Department to suspend enforcement of any rule that would be an unreasonable hardship upon the person, provided it is granted by variance and it does not violate the federal Clean Air Act (CAA).

Section 5536 (MCL 324.5536 *Variance*; considerations effecting) specifies considerations the Department shall give due recognition to in granting any variance, and conditions and requirements that shall apply.

Section 5538 (MCL 324.5538 *Variance; period granted; report; conditions*) specifies that any variance granted pursuant to Section 5535 shall be for a period of time specified by the Department at the time of granting but not to exceed one year. However, any variance may be continued from year to year.

Rule 225 (*Health-based screening level requirement for new or modified sources of air toxics*) requires that the person responsible for the new or modified source of air toxics comply with the health-based screening levels established by the Department.

### 3. Justification for the Department's Position

The Department has received and evaluated permit applications for natural gas combustion processes. Under Rule 225, some of these processes would not meet the requirements of the rule for one or more air toxic contaminants (acrolein being one) based upon the most recent technical data and information available to the applicant and the Department.

Requiring compliance with Rule 225 for the natural gas combustion portion of the sources qualifying for this variance would create an undue hardship and would be out of proportion to the benefits to be obtained by compliance. Natural gas is recognized as an environmentally beneficial, clean burning fuel. There is no better readily available alternative fuel for some sources at this time.

This variance will not cause violations of the CAA. While many of the sources that qualify for this variance are also regulated under the CAA, this variance does not exempt these sources from obtaining a permit under Rule 201 and complying with all aspects of the CAA.

Good engineering practice will be applied to sources that qualify for the variance to assure a continuing level of public health protection. Specifically, emissions from sources other than air pollution control equipment (e.g., regenerative thermal oxidizer) must be discharged unobstructed vertically upwards and stack heights must be at least 1.5 times the height of the most influential building to provide adequate dispersion of the emissions.

The Department believes further study is needed as to the toxic air contaminant emissions from the combustion of natural gas, in particular the toxics information for acrolein, and other possible alternatives to address this issue and to protect public health and the environment.

#### Final Approval

The Chief of the Air Quality Division, having had opportunity to review the variance and having been delegated authority to grant variances by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised on the premises,

Hereby grants the variance, which shall be entered in the record of the Department.

G. Vinson Hellwig, Chief

Air Quality Division

Michigan Department of Environmental Quality

Effective Date: January 20, 2006

# Continuation of Variance

The Chief of the Air Quality Division, having had opportunity to review the above variance effective on January 20, 2006, having been delegated authority to grant and continue variances by the Director of the Michigan Department of Environmental Quality pursuant to the provisions of Part 55 of Act 451 and otherwise being fully advised of the premises,

hereby continues the variance for a period of one year, which shall be entered in the record of the Department.

Vinson Hellwig, Chief

Air Quality Division

Michigan Department of Environmental Quality

Effective Date: January 20, 2009